

IN THE SPECIFICATION:

Kindly replace the paragraph beginning at page 17, line 13, as follows:

Fig. 6 is a factor graph of the parity matrix of equation 2. The factor graph contains two types of nodes the bit node (e.g. b1, b2, b3, and b4) and the check nodes (e.g. e1, e2). Each bit node corresponds to a bit in the codeword, and each check node (also referred to herein as an “equation node”) represents a parity-check equation (i.e., a row in the parity check matrix H). Hence, the factor graph for an LDPC code with an $M \times L$ parity check matrix H contains M check nodes and L bit nodes. An edge between a check node and a bit node exists if and only if the bit participates in the parity-check equation represented by the check node. The factor graph shown in Fig. 3 is “bipartite” in which the nodes can be separated to two groups, namely check nodes and bit nodes. Connections are allowed only between nodes in different groups.